

ASSIGNMENT 2

Textbook Assignment: "Levels," "Plumb Bulbs," "Scribers," "Squares," "Surface, Depth, and Height Gages," "Ring and Snap Gages and Gage Blocks," "Miscellaneous Measuring Gages," "Pliers and Tongs," and "Vises," chapters 10 through 18, pages 10-1 through 18-5.

- 2-1. Levels are designed for which of the following purposes?
1. To prove whether a plane is in the true vertical or true horizontal
 2. To prove whether a surface is in the true vertical or true horizontal
 3. Both 1 and 2 above
 4. To remove the rough spots on surfaces
- 2-2. Which of the following types of levels is used mostly in the construction industry?
1. The machinist's level
 2. The line level
 3. The iron bench level
 4. The striding level
- 2-3. What feature on a machinist's level increases its accuracy and sensitivity?
1. Its metallic coating
 2. Its extra large vial
 3. Its grooved bottom
 4. Its light weight
- 2-4. Which of the following levels has a main vial that is used to determine true horizontal, and two smaller vials that are used to determine true vertical?
1. The machinist's level
 2. The striding level
 3. The line level
 4. The master precision level
- 2-5. Which of the following levels is used to span existing cabling, piping, or similar obstructions?
1. The master precision level
 2. The iron bench level
 3. The striding level
 4. The machinist's level
- 2-6. The carpenter's level has three vials. One vial is mounted vertically and another is mounted horizontally. The third vial is mounted at what angle?
1. 35 degrees
 2. 45 degrees
 3. 55 degrees
 4. 90 degrees
- 2-7. A plumb bob is used for which of the following purposes?
1. To establish a true vertical transfer and line-up reference point
 2. To take readings or soundings in tanks or voids
 3. Both 2 and 3 above
 4. To measure the distance between two horizontal points
- 2-8. Plumb bobs are used by which of the following people?
1. Carpenters
 2. Surveyors
 3. Maintenance technicians
 4. All of the above
- 2-9. The surveyor's brass plumb bob may be either a spool type or what other type?
1. An adjustable cap type
 2. A permanent cap type
 3. A flexible cap type
 4. A reverse cap type

- 2-10. The surveyor's brass plumb bob comes with what minimum length of nylon, silk, or linen cord?
1. 2 feet
 2. 4 feet
 3. 7 feet
 4. 9 feet
- 2-11. The surveyor's brass plumb bob comes in which of the following sizes?
1. 2, 4, 6, and 8 ounce sizes
 2. 3, 5, 7, and 9 ounce sizes
 3. 1, 4, 8, and 9 ounce sizes
 4. 6, 8, 10, and 16 ounce sizes
- 2-12. Heavier plumb bobs are better for use in which of the following areas?
1. Windy areas
 2. Sandy areas
 3. Cold areas
 4. Hot areas
- 2-13. In reference to the solid steel plumb bob, which of the following statements is true?
1. It comes in 1, 3, and 10 ounce sizes
 2. The cord must be obtained from a separate source
 3. The cord comes with the plumb bob
 4. It is used when extreme accuracy is required
- 2-14. In reference to plumb bobs, which of the following statements is true?
1. Plumb bobs may be used as a lever
 2. Plumb bobs should be stored in a humid protective box
 3. Plumb bobs should be lightly coated with lubricating oil for long periods of storage
 4. Plumb bobs should receive a heavy coat of oil and should be wrapped in oil-soaked paper prior to being stored for long periods of time
- 2-15. What are the two basic types of machinist's scribes?
1. Single point pocket and bent point-straight point
 2. Straight point and bent point
 3. Rigid point and flexible point
 4. Hard point and soft point
- 2-16. The points on machinist's scribes can be protected in which of the following ways?
1. By reversing them in the handle
 2. By placing cork over the points
 3. By placing soft wood over the points
 4. All of the above
- 2-17. The carpenter's square is made up of which of the following parts?
1. The edge and skirt
 2. The blade and tongue
 3. The tongue and joint
 4. The skirt and tongue
- 2-18. What part of a carpenter's square is used to compute the number of board feet in a given piece of lumber?
1. The brace measure
 2. The rafter table
 3. The essex board measure
 4. The octagon or eight square scale
- 2-19. What part of a carpenter's square is used to find the exact lengths of common braces?
1. The essex board measure
 2. The brace measure
 3. The rafter table
 4. The tongue
- 2-20. Which of the following tools is used to check lines that are at right angles to each other?
1. A try square
 2. A flaring tool
 3. A scribe
 4. A digging tool

- 2-21. A right angle is what number of degrees?
1. 30 degrees
 2. 60 degrees
 3. 75 degrees
 4. 90 degrees
- 2-22. Which of the following tools is used for testing bevels and laying out angles?
1. A plumb bob
 2. A climbing tool
 3. A mattocks
 4. A T-bevel
- 2-23. To transfer measurements to work and to indicate the parallelism of surfaces, you should use which of the following tools?
1. A dial depth gage
 2. A vernier depth gage
 3. A surface gage
 4. A micrometer depth gage
- 2-24. Which of the following tools is used to measure the depth of holes, slots, counterbores, and recesses?
1. A snap gage
 2. A telescoping gage
 3. A two-piece collet die
 4. A rule depth gage
- 2-25. In reference to a vernier depth gage, which of the following statements is/are true?
1. It consists of a graduated scale that is either 6 or 12 inches long
 2. It has a sliding head that is designed to bridge holes and slots
 3. It cannot enter holes less than 1/4 inch in diameter
 4. All of the above
- 2-26. Which of the following tools can be used to measure the thickness of paint?
1. A dial depth gage
 2. A rule depth gage
 3. A machinist's level
 4. A master precision level
- 2-27. Height gages are normally graduated in which of the following divisions?
1. .015 inch
 2. .025 inch
 3. .500 inch
 4. .750 inch
- 2-28. In reference to a surface plate, which of the following statements is/are true?
1. A surface plate provides a true, smooth, plane surface
 2. A surface plate is often used as a level base for surface and height gages from which to make accurate measurements
 3. A surface plate is usually made of close grained cast iron and is rectangular in shape
 4. All of the above
- 2-29. In reference to ring gages, which of the following statements is true?
1. GO gages are larger than NO GO gages
 2. GO gages are smaller than NO gages
 3. GO and NO GO gages cannot be distinguished from each other
 4. GO gages and NO Go gages are always the same size
- 2-30. Which of the following gage classes indicates that the gage is precision lapped to close tolerances?
1. Class Y
 2. Class X
 3. Class Z
 4. Class ZZ

- 2-31. Which of the following gage classes is used only with ring gages?
1. Class ZZ
 2. Class Y
 3. Class Z
 4. Class X
- 2-32. The plain snap gage is made in two general types. What are the types?
1. Flat and round
 2. Square and round
 3. Adjustable and nonadjustable
 4. Fixed and flexible
- 2-33. Before an adjustable snap gage can be used, which of the following procedures must be accomplished?
1. The gage must be heated to a predetermined temperature
 2. The GO and NO GO buttons, pins, or anvils must be set to the proper dimensions
 3. The gage must be cooled to below freezing
 4. The locking screw and the adjusting screws must be removed
- 2-34. Before using gage blocks, you should take which of the following actions?
1. Remove the coat of rust preventive compound from the gage blocks
 2. Boil the gage blocks in water
 3. Freeze the gage blocks
 4. Remove the adjusting screws from the gage blocks
- 2-35. "Building gage blocks" is also known by which of the following terms?
1. Bonding them together
 2. Binding them together
 3. Wringing them together
 4. Bolting them together
- 2-36. Ordinary changes in temperature have a sizable effect on measurements made with precision gage blocks. What is the standard measuring temperature?
1. 50 degrees Fahrenheit
 2. 68 degrees Fahrenheit
 3. 68 degrees centigrade
 4. 72 degrees centigrade
- 2-37. You should NOT leave gage blocks wrung together for long periods of time for which of the following reasons?
1. The surfaces will warp
 2. The surfaces will turn blue
 3. The surfaces will tend to corrode
 4. The ends will become unbalanced
- 2-38. When using gage blocks, you must consider the source of error resulting from which of the following conditions?
1. Temperature
 2. Humidity
 3. Light
 4. Time
- 2-39. Gage blocks are used for which of the following purposes?
1. To test the outside air temperature
 2. To determine the humidity in a space
 3. To check the accuracy of tools, dies, and fixtures
 4. To test the strength of electrical wire
- 2-40. Which of the following tools can be used to verify the accuracy and wear of ring and snap gages?
1. Gage blocks
 2. Climbing tools
 3. Awls
 4. Scribes

- 2-41. You should NEVER touch the measuring surfaces of gage blocks any more than necessary. The moisture from your hands contains an acid that can cause which of the following problems?
1. The gage blocks to warp
 2. The gage blocks to stain
 3. The gage blocks to attract an electrical charge
 4. The gage blocks to become brittle
- 2-42. After cleaning gage blocks, you should always take which of the following actions?
1. Coat the gage blocks with heavy grease
 2. Boil the gage blocks in gasoline
 3. Cover the gage blocks with a film of acid-free oil
 4. Paint the gage blocks with lead-free paint
- 2-43. Thickness gages are often referred to by which of the following terms?
1. Width gages
 2. Height gages
 3. Length gages
 4. Feeler gages
- 2-44. Center gages are graduated in which of the following increments?
1. 14ths, 20ths, 24ths, and 32nds of an inch
 2. 15ths, 22nds, 26ths, and 34ths of an inch
 3. 17ths, 28ths, 30ths, and 36ths of an inch
 4. 19ths, 25ths, 29ths, and 37ths of an inch
- 2-45. You can use a screw pitch gage to check the pitch of which of the following types of threads?
1. U. S. Standard and Metric
 2. National Form and V-form
 3. Whitworth cut
 4. All of the above
- 2-46. The pitch of a screw thread is the distance between the center of one tooth to the
1. end of the screw
 2. center of the next tooth
 3. center of the screw head
 4. head of the screw
- 2-47. Telescoping gages are used for which of the following purposes?
1. To gage larger holes
 2. To measure inside distances
 3. Both 1 and 2 above
 4. To measure the lenses on telescopes
- 2-48. Telescoping gages normally have what maximum measuring capacity?
1. 3 inches
 2. 6 inches
 3. 8 inches
 4. 9 inches
- 2-49. On a thread cutting tool gage, what do the numbers represent?
1. The number of threads per inch
 2. The number of threads per foot
 3. The number of threads on a screw or bolt
 4. The length of a screw or bolt
- 2-50. Each blade of a fillet and radius gage is normally marked in which of the following increments?
1. 10ths
 2. 32nds
 3. 42nds
 4. 64ths
- 2-51. Which of the following tools is used to check the accuracy of drill cutting edges after grinding?
1. A marking gage
 2. A thickness gage
 3. A drill point gage
 4. A rule depth gage

- 2-52. A wire gage is normally what shape?
1. Square
 2. Triangular
 3. Circular
 4. Rectangular
- 2-53. Drill gages have a series of holes. The holes are marked in which of the following ways?
1. Letters
 2. Fractions
 3. Numbers
 4. All of the above
- 2-54. Marking gages are normally made from which of the following materials?
1. Copper or tin
 2. Wood or steel
 3. Plastic or glass
 4. Paper or plastic
- 2-55. Which of the following tools can be used to check the piston ring gap clearance in a cylinder bore?
1. A thickness gage
 2. A marking gage
 3. A wire gage
 4. An awl
- 2-56. Which of the following types of pliers can be used to cut small materials such as wire and cotter pins?
1. Parallel jaw
 2. Flat-nose
 3. Slip-joint
 4. Diagonal cutting
- 2-57. Which of the following types of pliers is used only for cutting?
1. Diagonal
 2. Slip-joint
 3. Round-nose
 4. Flat-nose
- 2-58. The piston holding vise is a special purpose vise which can hold engine pistons up to and including what maximum diameter?
1. 3 1/2 inches
 2. 5 1/2 inches
 3. 7 2/3 inches
 4. 9 3/8 inches
- 2-59. The pin vise is a special purpose vise which has a knurled metal handle and a chuck. It is designed to hold material from 0 to what maximum diameter?
1. 0.187 inch
 2. 0.397 inch
 3. 3.254 inches
 4. 8.134 inches
- 2-60. The handsaw filing vise is a special purpose vise used for holding handsaws while they are being sharpened. It has jaws that are normally between 9 1/2 and what maximum number of inches?
1. 5 inches
 2. 7 inches
 3. 11 inches
 4. 32 inches